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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,825	12/04/2000	Freeman Leigh Rawson III	AUS920000347US1	4289

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EXAMINER	
CHOUDHURY, AZIZUL Q	
ART UNIT	**PAPER NUMBER**
2145	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/727,825	RAWSON, FREEMAN LEIGH	
	Examiner	Art Unit	
	Azizul Choudhury	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-11,13-17 and 20-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,6-11,13-17 and 20-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 9 and 16 recite the limitation "lightweight" in probes. There is insufficient antecedent basis for this limitation in the claim. The term continues to remain broad and indefinite. If the probe is a hardware piece, then the term "lightweight" is suitable. However, if the term is referring to a software probe, the term is not a suitable adjective. Amendments are requested to clarify the claims using the term "lightweight."

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6-11, 13-17 and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al (US Pat No: US005666534A) in view of de la Salle (Pat No. US005878420A), referred to hereafter as Gilbert.

1. With regards to claims 1, 8 and 15, Gilbert teaches through de la Salle a method (systems and computer programs are methods) of gathering management information from servers within a cluster, comprising: receiving management information from probes located at each of a plurality of servers within the cluster; wherein each server includes a plurality of defined levels, each level having an associated individual probe, which gathers management information from that level of that server; aggregating, at a designated management server, the received management information, wherein the management information received from similar levels across the plurality of server within the cluster is aggregated into a single representation of the similar levels rather than individual levels for each of the plurality of servers, wherein the designated management server is a single server that provides centralized management for all of the plurality of servers within the cluster such that localized management at each server is substantially eliminated; and combining each of the single representation of the aggregate levels of management information to form a single management image of the cluster at the designated management server

(Gilbert teaches a design for monitoring machines within a network (column 2, lines 49-59, Gilbert). To properly perform such tasks, means by which to obtain data from the remote devices (such as probes) must exist within any network monitoring design. Gilbert further teaches a design where information is obtainable about standalone and clustered machines (column 4,

lines 26-29, Gilbert). In addition, Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). Gilbert's disclosure further teaches that the communication protocol needed by the remote devices can be met (column 4, lines 39-50, Gilbert) hence, the Gilbert's monitoring design must also be aware of networking traits of the remote devices. Furthermore, for a network monitoring design to function properly, it is inherent that means to detect the remote devices' OS information be present as well. The existence of means to detect OS information for each remote device is also supported by the fact that means for software error detection is present (column 9, lines 65-67, Gilbert). Hence means for detecting hardware, software, OS, and network information regarding each remote device is present within Gilbert's design. Finally, all the error information gathered by a probe is saved within a single record (column 9, lines 30-31, Gilbert). Such a record is viewed as being equivalent to the claimed image. However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized

management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

2. With regards to claims 2, 9 and 16, Gilbert teaches through de la Salle, a method (systems and computer programs are methods) wherein the probes are lightweight probes and receiving management information from probes at each of a plurality of levels within every server within the cluster further comprises: receiving information from lightweight probes within every server at each of the plurality of levels including an application server level, an operating system level, a network level, and a hardware level

(As stated earlier, Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). Gilbert's disclosure further teaches that the communication protocol needed by the remote devices can be met

(column 4, lines 39-50, Gilbert) hence, the Gilbert's monitoring design must also be aware of networking traits of the remote devices. Furthermore, for a network monitoring design to function properly, it is inherent that means to detect the remote devices' OS information be present as well. The existence of means to detect OS information for each remote device is also supported by the fact that means for software error detection is present (column 9, lines 65-67, Gilbert). Hence means for detecting hardware, software, OS, and network information regarding each remote device is present within Gilbert's design. Finally, all the error information gathered by a probe is saved within a single record (column 9, lines 30-31, Gilbert). However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have

combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

3. With regards to claims 3, 10 and 17, Gilbert teaches through de la Salle, a method (systems and computer programs are methods) wherein: aggregating the received management information at each of the plurality of levels across all servers within the cluster further comprises: aggregating the received management information at each of the plurality of levels including an application server level, an operating system level, a network level, and a hardware level; and aggregating the received management information at a designated management server rather than on each server within the cluster; and combining the aggregate levels of management information to form a single management image of the cluster further comprises combining the aggregate levels of management information at the designated management server

(As stated earlier, Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). Gilbert's disclosure further teaches that the communication protocol needed by the remote devices can be met (column 4, lines 39-50, Gilbert) hence, the Gilbert's monitoring design must also be aware of networking traits of the remote devices. Furthermore, for a network

monitoring design to function properly, it is inherent that means to detect the remote devices' OS information be present as well. The existence of means to detect OS information for each remote device is also supported by the fact that means for software error detection is present (column 9, lines 65-67, Gilbert). Hence means for detecting hardware, software, OS, and network information regarding each remote device is present within Gilbert's design. Finally, all the error information gathered by a probe is saved within a single record (column 9, lines 30-31, Gilbert). Such a record is viewed as being a result of the claimed aggregating process and hence the process of aggregating the information exists in Gilbert's design. However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have

combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

4. With regards to claim 11, Gilbert teaches through de la Salle, a method (systems and computer programs are methods) wherein the step of aggregating the received management information at each of the plurality of levels including an application server level, an operating system level, a network level, and a hardware level further comprises: aggregating the received management information at a designated management server rather than on each server within the cluster

(The network monitoring tasks of Gilbert's design are performed from a host device (column 6, lines 9-24, Gilbert). In addition, as stated earlier, Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). Gilbert's disclosure further teaches that the communication protocol needed by the remote devices can be met (column 4, lines 39-50, Gilbert) hence, the Gilbert's monitoring design must also be aware of networking traits of the remote devices. Furthermore, for a network monitoring design to function properly, it is inherent that means to detect the remote devices' OS information be present as well. The existence of means to detect OS information for each

remote device is also supported by the fact that means for software error detection is present (column 9, lines 65-67, Gilbert). Hence means for detecting hardware, software, OS, and network information regarding each remote device is present within Gilbert's design. Finally, all the error information gathered by a probe is saved within a single record (column 9, lines 30-31, Gilbert). Such a record is viewed as being a result of the claimed aggregating process and hence the process of aggregating the information exists in Gilbert's design. However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have combined the teaching of Gilbert with those of de la Salle, to provide a means

and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

5. With regards to claim 6, 13 and 20, Gilbert teaches through de la Salle, a method (systems and computer programs are methods) further comprising: generating an extensible markup language data stream containing the single image of the cluster, wherein multiple XML streams are generated when the cluster is partitioned among different organizations having content and applications hosted on the cluster; and transmitting the data stream to an adapter for each system management application executing on a designated management server within the cluster.

(Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). No limitation is made regarding what language to use to make such an image in Gilbert's teachings. It can safely be assumed that any language acceptable within Unix (the OS used in the example provided by Gilbert) is acceptable for the markup language. However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The

probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

6. With regards to claims 7, 14 and 21, Gilbert teaches through de la Salle, a method (systems and computer programs are methods) further comprising: generating commands based on the single image of the cluster; dividing the commands based upon a plurality of levels including an application server level, an operating system level, a network level, and a hardware level; subdividing the divided commands according to individual servers within the cluster; and transmitting each subdivided commands to respective probes at a corresponding level within a server within the cluster

(Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that

can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). Gilbert's disclosure further teaches that the communication protocol needed by the remote devices can be met (column 4, lines 39-50, Gilbert) hence, the Gilbert's monitoring design must also be aware of networking traits of the remote devices. Finally, all the error information gathered by a probe is saved within a single record (column 9, lines 30-31, Gilbert). In addition, Gilbert discloses that means to detect and correct errors within remote devices through commands exists within Gilbert's design (column 8, line 60 – column 9, line 9, Gilbert). However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle). Plus the design allows for a user to use the collected information to manage and tune the network (equivalent to the claimed generating, dividing and transmitting commands) (column 4, lines 12-16, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

7. With regards to claims 22 and 24, Gilbert teaches through de la Salle, the method further comprising: generating an XML stream corresponding to an image of the cluster, wherein multiple XML streams are generated when the cluster is partitioned among different organizations having content and applications hosted on the cluster; and transmitting the XML stream to adapters for existing system management software

(Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). In network monitoring and network management systems, the administrative device (centralized management computer) sends out and receives streams of data from the different network paths. No limitation is made regarding the type of language used for the network streams. XML is a common markup language and since no limitation is place on the language, it is acceptable within Gilbert's design. However, Gilbert's disclosure does not

discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle).

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

8. With regards to claims 23, 25 and 26, Gilbert teaches through de la Salle, the method further comprising: executing management system's agent code, an associated adapter, and thin server manager on a meta server, whereby management data transfers are local and wherein, when the cluster is partitioned among a number of different organizations having content and applications hosted on the cluster, activating multiple XML streams, multiple adapters, and multiple system management agents, one per partition; and when commands are

received from the management system, generating commands needed to control operation of the cluster; dividing the commands generated by level and subdividing command levels by system; and transmitting individual commands to a corresponding probe within an identified level of a particular system

(Gilbert's design has the means to monitor all actions by remote devices (column 5, lines 1-5, Gilbert). Amongst those remote device characteristics that can be obtained are those concerning hardware and software information (column 9, lines 65-67, Gilbert). In network monitoring and network management systems, the administrative device (centralized management computer) sends out and receives streams of data from the different network paths. No limitation is made regarding the type of language used for the network streams. XML is a common markup language and since no limitation is place on the language, it is acceptable within Gilbert's design. However, Gilbert's disclosure does not discuss the use of multiple probes, whose information is compiled together to generate a network report on a single computer.

The network design by de la Salle allows for a number of probes to each be located at geographically different locations to obtain distinct information. The probes each generate objects, which are later received by a database computer and are built into a single network information report. Hence, a centralized management computer allows for a user to view the network information in a single report, information that has been gathered by a plurality of probes (column 3, lines 41-67, de la Salle). Furthermore, the design allows for the information to

be used to tune and manage the network devices (column 4, lines 12-16, de la Salle). Hence the claimed steps for making and sending out commands, exists within de la Salle's design.

Both Gilbert and de la Salle teach designs enabling a user to view various elements of each networked component within a network. It would have been obvious for one skilled in the art, during the time of the invention, to have combined the teaching of Gilbert with those of de la Salle, to provide a means and method for easily determining the configuration of an expansive network (column 3, lines 11-12, de la Salle)).

Remarks

The examiner has carefully evaluated the remarks along with the amended claims. In response, the examiner has changed the rejection format to a 103 with a new art by de la Salle. The claims continue to describe a network management system. The use of multiple probes at different levels is nothing new. It is simply differently phrased. When a network management system obtains software information along with hardware information, such as Gilbert's, it is obtaining information from different levels. The software level is different than the hardware level. The de la Salle prior art has been added to point out that network management designs exist that use multiple probes whose information is combined together to formulate a single report. Plus, the claimed traits such as partitioned devices of a network and thin clients and the like are

simply descriptions of network layout. Both designs, Gilbert's and de la Salle's, allow for various network layouts.

Finally, the examiner would like to point out that the rejection here is rejecting the claimed invention. The limitations placed within the claimed language do not illustrate a design for a novel network management system. Hence, while it is appreciated that efforts have been made to amend the claims, the examiner continues to encourage the applicant and their representatives to make the necessary amendments, in an attempt to disclose novel characteristics

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on (571) 272-3896. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

JACK B. HARVEY
SUPERVISORY PATENT EXAMINER